RAJYA SABHA

Wednesday, the 13th May, 1992/
23 Vaisakha, 1914 (Saka)

The House met at eleven of the clock.
Mr. Chairman in the Chair.

ORAL ANSWERING TO QUESTIONS

Proposal for setting up of a Chemical Unit to manufacture Alfa Olefins

@*221. SHRI CHIMANBHAI MEHTA:†
SHRI RAMSINH RATHWA:

Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

(a) whether Government's attention has been drawn to the newsitem which appeared in the 'Business Standard of 28th March, 1992 regarding a proposal for setting up a chemical unit for the manufacture of Alfa Olefins;

(b) whether "Sultone", a cancer causing substance gets produced in the manufacture of detergent from Alfa Olefins;

(c) if so, whether Government have taken all necessary precautions including clearance from the Ministry of Environment before granting approval for setting up of such health hazardous manufacturing industry in the country;

(d) if so, with what results; and

(e) if not, what are the reasons therefor?

THE MINISTER OF STATE OF THE MINISTRY OF ENVIRONMENT AND FORESTS (SHRI KAMAL NATH): (a) Yes, Sir.

(b) During the conversion of Alfa Olefins to Alfa Olefin Sulphonates which are used in the manufacture of detergents, some sultones are likely to be produced as intermediates which get converted into sulphonates on neutralisation.

(c) and (d) All aspects including environmental aspects are examined before giving clearance to units manufacturing Alfa Olefins.

(e) Does not arise.

SHRI CHIMANBHAI MEHTA: Sir, the same question was put to the Environment and Forests Ministry just a week back, on the 6th May, 1992. I know that myself. Now Shri Kamalnathji is conversant with all the technicalities. But in today's reply some information has been suppressed which was not done a week back. The reply given a week back is with me here which clearly stated studies carried out on mice suggest that one of these sultones, namely, propane sultone has potential for causing skin cancer. That was the reply given to an Unstarred Question. In today's question I asked whether sultone is a cancer causing substance. The Minister has given a misty reply.

MR. CHAIRMAN: What is your question?

SHRI CHIMANBHAI MEHTA: My question comes here. Why has he given two kinds of replies? That is part (a) of my question. From that a subsidiary question arises. The Minister said that sultones are intermediates. But they are not intermediates. They are end products. When end products are used in the manufacture of soap or detergents, it causes skin cancer. In the developed countries this product is almost banned. Only 1 per cent of Alpha Olefin is used throughout the world. The Ministry of Petroleum has said that Alpha Olefin is a toxic substance. The Consumer Guidance Society in its report in 1990 said that it was a toxic material. I was told by a technical expert that it was not sulphonatable at all. Probably the Minister has given a wrong reply... *(Interruptions)*...

@Previously Starred Question 141, transferred from the 7th May, 1992.

†The Question was actually asked on the floor of the House by Shri Chimanbhai Mehta.

Only 1 per cent of it is being used in the world. In spite of the Ministry of Petroleum's instructions, why did you give clearance for conversion of Alpha Olefins to Alpha Olefin sulphonates in the manufacture of detergents? Why did you do it? What are the compelling reasons for giving two kinds of replies within a week to the same question?

MR. CHAIRMAN: He wants to know, why you have done it against the advice of the Ministry of Petroleum?

SHRI KAMAL NATH: Sir, I appreciate the concern of the hon. Member about the alpha olefins cancerous effects. But I would like to clarify the misapprehension which the hon. Member has. In the process of sulphonation of sultones which is used during the course of manufacture of detergents, no doubt they are cancer bearing. They have shown that there can be effects of cancer. But, Sir, this is not the end product. In the new technology which is being used, this is not left as sultones. But they are converted into sulphonates. On an examination of these sulphonates the research carried out on it show that it does not have cancerous causing effects.

With regard to the hon. Member's question that on the 6th May, 1992 I had given a different answer to the same question, that is not correct. I have a copy of it before me. My reply was consistent with what I am saying today. The question on the 6th May was differently worded. And, as I said, the difference is between sultones and sulphonates. Sultone is an intermediate product whereas sulphonate, which it gets converted into, is not cancer-bearing.

With regard to the hon. Member's statement that the Committee on Petrochemicals had recommended that this should not happen, this should not be produced, Sir, that group had, in fact, recommended that a capacity of one lakh tonnes per annum could be set up. So, the Committee which had gone into the aspects of its cost, toxicity and international market situation, had, in fact, recommended that we should set up a capacity of one lakh tonnes per annum.

SHRI CHIMANBHAI MEHTA: Sir, my question remains that sultones are not sulphonated bulk. The Minister has answered it in a different way. Anyway, it is a different matter and I do not want to go into that.

SHRI KAMAL NATH: I will explain, Sir, if he so desires.

SHRI CHIMANBHAI MEHTA: Anyway, you are saying that some new process has been invented.

MR. CHAIRMAN: Now, you put the second supplementary.

SHRI CHIMANBHAI MEHTA: My second question is this. In the world, research has been done about these alfa olefins which are in production for the last 30 years. Still, only one per cent of detergents in the world are produced by this process. Why has this one per cent, leaving all others, been picked up? I will again examine what you are saying about the Petrochemicals Committee. That is another matter. Now I will have to go by the information given by you. So, I would like to ask these questions. What was the compelling reason for you to pick up this while, in spite of three decades' research, in the world as a whole it is not used? In fact, skin cancer did develop on a very wide scale. And Sweden has banned it. Did you go into all these aspects? Why did you think of clearing this project? I do not know when the Environment Ministry has cleared it. I do not think you have cleared it. But the Chemicals Ministry has cleared it. Have you also cleared it? These are my questions.

SHRI KAMAL NATH: Sir, soaps and detergents are manufactured by two methods. One is by the method of LAB, that is, Linear Alkyl Benzenes. The other is by the method of alfa olefins. Both are used in the manufacture of soaps and detergents. Due to the superiority of alfa olefins in terms of bio-degradability and its performance in hard water, this is now being preferred. Sir, in fact this has very good bio-degradable properties. It is because of this that we have also considered this under the eco-mark scheme. High bio-degradability would mean complete decomposition of complex organic molecules into elements which are non-toxic. And it is very widely used in shampoos, etc. all over the world. The hon. Member says that it is used in only one per cent of soaps. I am not very aware of that.

SHRI CHIMANBHAI MEHTA: Yes. It is used only to the extent of one per cent in soaps and detergents.

SHRI KAMAL NATH: I am not aware of that. I shall certainly examine that aspect. But I do know that it is very widely used in shampoos and because of its high bio-degradability—that means it does not remain in the soil for more than five days—it has been preferred from the point of view of pollution, both soil pollution and water pollution, in comparison with the LAB method.

श्री आनन्द प्रकाश गौतम : सभापति महोदय, उद्योगों को लगाने में व्यवसायिक दृष्टिकोण को प्राथमिकता दी जाती है जब कि उससे होने वाली हानियों की ओर ध्यान देना पर्यावरण विभाग की जिम्मेदारी होती है कि वह देखे कि मानव के लिए वे कितने हितकर हैं और कितने नुक्सानदेह हैं । आजकल डिटरजेंट्स के बहुत से कारखाने लगते चले जा रहे हैं और उनकी मांग भी बढ़ती जा रही है ।

एल्फा ओलिफिन्स को ऐल्फा सल्फेट में बदलने के दौरान जो उसमें सल्टोन पैदा हो जाता है, उसके द्वारा कैंसर हो जाने की संभावना हो जाती है जो कि एक बड़ा भयंकर रोग है । मैं माननीय मंत्री जी से यह जानना चाहता हूं कि इस प्रकार के जितने भी कारखाने हैं उनमें पर्यावरण विभाग की तरफ से, वहां जो सल्टोन पैदा होता है उसको निष्प्रभावी बनाने के लिए कोई संयंत्र लगाने की व्यवस्था होती है ? आजकल जो कमर्शियल एटीट्यूट बढ़ रहा है, कारखाने लगाने में लाभ हानि के बारे में ज्यादा सोचा जाता है और जब कि सरकार की तरफ से प्राइवेटाइजेशन बढ़ रहा है तो इसमें निश्चित रूप से उद्योग व्यावसायिक दृष्टिकोण से लगते हैं और उनमें मानवी दृष्टिकोण का अभाव रहता है । तो मैं यह जानना चाहता हूं कि इस प्रकार के संयंत्र कंपलसरी, अनिवार्यरूप से इन उद्योगों में लगाने के लिए कोई जांच-पड़ताल हमारा पर्यावरण विभाग कर रहा है ? एक और बात इसमें और है कि जो इन कारखानों में काम करते हैं निश्चितरूप से उन पर इसका प्रभाव पड़ता होगा तो क्या उनकी वार्षिक मैडिकल जांच-पड़ताल की जाती है ? वे लोग इससे प्रभावित हुए हैं या नहीं ? अगर हुए हैं कि तो ऐसे कितने लोगों के बारे में जानकारी मिली है जो इस रोग से प्रभावित हुए हैं ?

श्री कमलनाथ : जो यह सल्टोन की बात हो रही है, जैसा मैंने पहले प्रश्न के उत्तर में कहा है कि यह सल्टोन जो है यह मैनुफेक्चरिंग प्रोसेस में न्यूट्रिलाइज हो जाता है । जब यह न्यूट्रिलाइज हो जाता है तो इसमें कोई पर्यावरण का खतरा नहीं रहता । पर फिर भी हमारे स्टेंडर्ड इसमें बने हुए हैं और इस पर पूरी निगरानी, पूरी जांच समय-समय पर की जाती है । जो प्रोसेस आज हम अपने देश में यूज कर रहे हैं उसमें यह सल्टोन का खतरा नहीं है यह एक इंटरमीडिएट प्रोसेस है । इसको हाई टैम्परेचर और अल्कली में डालकर इसका कन्वर्जन टू सल्फानेट्स हो जाता है । जो एमीशन होता है वह सल्टोन का नहीं होता पर यह सल्फोनेट का होता है ।

श्री सभापति : उसके लिए इंतजाम कर दिए ? वह किया जाय यही वे जानना चाहते हैं ।

श्री कमलनाथ : जी हां, स्टैंडर्ड बने हुए हैं और उस पर ...

श्री सभापति : वह यह कहते हैं कि वह सब किया जाए ।

SHRI CHIMANBHAI MEHTA: They cannot control this process. This is highly conversion-based process. (*Interruptions*)

MR. CHAIRMAN: They are Insisting on conversion. Are you insisting that it should be converted? (*Interruptions*)

SHRI KAMAL NATH: Yes. That is the process which is being used and we are insisting that this neutralisationn takes place. (*Interruptions*). Process for conversion.

SHRI CHIMANBHAI MEHTA: The industries require a very sophisticated...

श्री आनन्द प्रकाश गौतम : इससे कोई प्रभावित होता है या नहीं । इसका कोई ...

श्री चिमनभाई मेहता : डिटरजेंट स्माल स्केल इंडस्ट्री है । ये हट में हैं तो वहां कैसे कन्वर्जन में कंट्रोल कर पायेंगे यह बात जो है ...

श्री आनन्द प्रकाश गौतम : जिनकी इससे प्रभावित होने की संभावना होती है उनका कोई मैडिकल चेकअप वगैरह सालाना होता है या नहीं ?

श्री सभापति : उनका यह कहना है कि जहां यह तैयार होता है वहां जो काम करते हैं उनका चैकअप हुआ है कि उनको कैंसर-वैंसर तो नहीं हुआ ।

श्री कमलनाथ : जैसे मैंने 6 मई के उत्तर में कहा था और जैसा मैंने अभी भी कहा कि सल्टोन की जो जांच की गयी है, उसमें कैंसर का खतरा है पर क्योंकि सल्टोन बाई-प्रोडक्ट नहीं है, सल्टोन एन्ड में डिस्चार्ज नहीं होता यह न्यूट्रिलाइज हो जाता है इसलिए इसका कोई असर वहां के कारखाने के कर्मचारियों पर नहीं होता ।

श्री सिकन्दर बख्त : कन्वर्जन के दौरान एटमोसफेयर में क्या ... **(व्यवधान)** ..

†श्री सिकन्दर बख्त : कनवरजन के दौरान एटमोसफेयर में क्या... "मदाखलत"...

श्री आनन्द प्रकाश गौतम : उनके चैक-अप की व्यवस्था सालाना करते हैं या नहीं करते हैं । यह तो पहले ही मान लिया है कि इसमें कोई दिक्कत नहीं होती कोई रोग नहीं होता । लेकिन क्या कोई व्यवस्था प्रिकॉशन्स के रूप में कर रहे हैं ?

श्री कमलनाथ : अगर सल्टोन डिस्चार्ज होगा तभी तो कर्मचारियों पर उसका असर होगा, कुछ अफेक्ट होगा । पर सल्टोन डिस्चार्ज होता ही नहीं है । यह कन्टिन्यू प्रोसेस है और इसका न्यूट्रिलाइजेशन हो जाता है । फिर भी अगर स्पेसिफिक किसी कारखाने का मामला हो ...

श्री आनन्द प्रकाश गौतम : यह सामान्य है मान्यवर, इसको प्रिकॉशन के रूप में कोई लेने से कोई हर्ज नहीं है । उनकी सालाना जांच करा ली जाय कि उसका कोई कुप्रभाव नहीं पड़ता, इस बारे में तो आप सदन को आश्वस्त करें ।

श्री कमलनाथ : हमने इसको चैक कर लिया है । लेकिन माननीय सदस्य के सुझाव पर हम फिर से एक दफा और चैक कर लेंगे ।

डा. अबरार अहमद : माननीय सभापति महोदय, ऐल्फा और ओलिफिन्स से डिटरजेंट के निर्माण में जो सल्टोन द्वारा कैंसर के खतरे की बात माननीय मंत्री जी ने कही कि ज्यादा नहीं है लेकिन बहुत कम संभावना कैंसर की आपने स्वीकार की

†Transliteration in Arabic Script.

है तो मैं इस संबंध में आपके माध्यम से माननीय मंत्री महोदय से जानना चाहूंगा कि हमारा देश सांइस में काफी तरक्की कर चुका है। तो क्या एल्फा ओलिफिन्स के बजाय कोई ऐसी और वैकल्पिक वस्तु नहीं है जिससे इसका प्रयोग बिलकुल बन्द कर के दूसरी वस्तुओं से डिटरजेंट बनाए जायें और यह खतरा बिलकुल दूर हो जाए। क्योंकि अगर 0.001 प्रतिशत भी कैंसर का खतरा हो तो कैंसर जितनी भयंकर बीमारी है कि यदि यह बीमारी हजार में से या एक लाख में से किसी एक भी आदमी को होती है तो यह बहुत दुर्भाग्य-पूर्ण बात है। मैं यह जानना चाहता हूं कि क्या इसकी जगह ऐसी कोई खोज हुई है कि दूसरी वस्तु का प्रयोग कर सकें और इसको बिलकुल बैन कर सकें?

श्री कमलनाथ : सभापति महोदय, जैसे मैंने कहा है कि सल्टोन में खतरा साबित हुआ है। इसमें सल्टोनस में खतरा जरूर है परंतु सल्टोन डिसचार्ज नहीं होते। मेरी जानकारी में कोई और विकल्प एल्फा ओलिफिन्स का नहीं है। जो पुराना प्रोसेस एल०ए०बी० का है वह तो आज के दिन भी जारी है। केवल दो तीन कारखाने ही हैं जो ऐल्फा ओलिफिन्स से साबुन और डिटरजेंट बना रहे हैं। अभी तक ऐसी कोई टैक्नोलोजिकल डवेलपमेंट नहीं हुई जिससे इसका कोई दूसरा उपाय निकाल सकें। मुझे विश्वास है कि कारखाने उसका भी उपयोग करेंगे।

श्री अजीत जोगी : दूसरे देशों में तो बैन है (**व्यवधान**)

डा. अबरार अहमद : सभापति महोदय, जिन देशों में इस पर पाबन्दी है, वह क्या करते हैं। कुछ न कुछ तो विकल्प होगा ही। क्या हम भी उन विकल्पों को अपने देश में प्रयोग करेंगे?

MR. CHAIRMAN: He wants to know whether it has been banned in other countries.

SHRI KAMAL NATH: Sir, it has not been banned in other countries. There is no question of its being banned in other countries and our allowing this here. This Alfa Olefin is a starting raw material and is used in many things, not just in soaps. It is used in plastic, plasticisers etc. So, the apprehension was about the sultones being discharged. Hon. Members were right, in the older technology there was an element of risk, but now in the new technology... (*Interruptions*)...

SHRI SIKANDER BAKHT: At what stage does an element of risk exist?

MR. CHAIRMAN: In the new technology it doesn't exist.

श्री सिकन्दर बख्त : वह स्टेज मौजूद है या नहीं? (**व्यवधान**)

†[شری سکندر بخت : وہ اسٹیج موجود ہے یا نہیں (مداخلت)]

श्रीमती सत्या बहिन : क्या उन्होंने जानकारी प्राप्त की है कि वहां पर बैन नहीं है, क्या मंत्री जी सदन को बता सकते है कि बैन नहीं है (**व्यवधान**)

श्री कमलनाथ : यह बैन नहीं है। इसके बारे में हमें पूरी जानकारी है। कई लोगो ने मुझे इसके बारे में लिखा था। हमने पूरी जानकारी ली है, वह बाहर बिलकुल बैन नहीं है।

SHRI MOHD. KHALEELUR RAHMAN: Sir, the reply of the Minister is very evasive. He has ignored the cancer hazards of sultones in AOS and has tried to sidetrack the issue by talking of toxicity in general, rather than carcinogenecity in specific terms. The Minister has admitted the presence of sultones in AOS. Sir, my first question is this. Once the Minister has admitted contamination of sultones in AOS,

†Transliteration in Arabic Script.

has the Government the necessary infrastructure to monitor generation of sultones in AOS and guarantee availability of sultone-free AOS to consumers?

My second question is: Is the Minister aware that eco-labelling scheme proposed by the Ministry requires absolute absence of any carcinogenic ingredients as a criterion? Would the Minister still like to call AOS as user-friendly and encourage its usage as proposed in his reply?

SHRI KAMAL NATH: Sir, I have repeatedly said and I am repeating it once again, Sir, that—I have not evaded, I have not evaded the reply by saying that sultones are not cancer causing—sultones are cancer causing. In the older technology there was a discharge of sultones. There was an apprehension. And, Sir, now in the new process which is being adopted by soap and detergent manufacturers in our country, this is not so. This is converted into sulphonates. In the eco-mark scheme we have prescribed that there should be 97 per cent bio-degradability. Sir, it is because of this, it is so, and I think this fear is being spread by some soap manufacturers that there is cancer, this phobia about cancer, because some of the soap manufacturers using the other process, the LAB, have not qualified under the eco-mark scheme because they do not have 97 per cent bio-degradability. It is only this Alfa Olefin which is capable of reaching the level of 97 per cent bio-degradability. So some of the soap manufacturers who had not qualified for this had brought to my notice this matter that Alfa Olefin can cause cancer. When we did examine it we came to the firm conclusion that in the process here it is not the case. Sulphonates are not causing cancer, whereas Sultone which was the earlier technology, is. So, really this fear has been propagated by those manufacturers. It has come out in the Press but these fears are being propagated by those manufacturers who are using....

SHRI CHIMANBHAI MEHTA: Is this is the way you are going to reply—not on merits? (*Interruptions*)

MR. CHAIRMAN: Mr. Murasoli Maran. (*Interruptions*) I called him.

SHRI MURASOLI MARAN: Mr. Chairman, Sir, the hon. Minister is....

MR. CHAIRMAN: Let him put the question.

SHRI MURASOLI MARAN:...candid enough to admit that Sultone contains cancer—causing germs. But he says in the new technology the evil effects of Sultone are nullified or neutralised. I would like to know how it is neutralised. If Sultone is neutralised in the form of water, water carries the cancerous germs. If it vanishes into thin air, the air is polluted. I would like to know from the hon. Minister whether he could enlighten us about the fact how it is neutralised. Where does the cancer-producing evil elements vanish? Will it subsist in some other form of pollutant in the air, water or discharge?

SHRI KAMAL NATH: It is a highly technical question. But I shall endeavour to answer it. Alfa Olefin Sulphate is now manufactured by using Sulphur Trioxide which is called SO in a thin film reactor. In this process small quantities of Sultone are produced. When the ensuing product is utilised ...(*Interruptions*)... I am telling you. You wanted to know how it happens. (*Interruptions*)... Now you listen to me. You want to know how it happens. Now I am telling you how it happens. (*Interruptions*)...

MR. CHAIRMAN: That is what he is telling you.

SHRI KAMAL NATH: I shall also try to organize a visit of the hon. Member to one of the plants which are producing it so that he can see it

for himself. As it is, I would like to repeat....

MR. CHAIRMAN: I hope you did not get him. You don't want to answer him.

SHRI KAMAL NATH: No, Sir, he will no get the answer. In this process....

SHRI S. JAIPAL REDDY: If the hon. Minister gives us an assurance that we will not be exposed to hazardous carcinomas, we don't mind.

SHRI KAMAL NATH: I will not mind. I will go along with him so that both of us will be exposed. In this process, the Sultone...

SHRI G. SWAMINATHAN: The Minister should be neutral. The Minister has extended invitation to one or two Members only.

MR. CHAIRMAN: He is extending you also.

SHRI KAMAL NATH: Sir, in this process a small quantity of Sultone which is produced is neutralised by high temperature by adding alkali. Sultone and Alfa Olefin Sulphonic Acid are....

SHRI MURASOLI MARAN: Will it exist in some other form of pollutant and disturb the public? Will it affect the common man in the process? What happens to the cancer-producing germs?

SHRI N. E. BALARAM: Sir, will there be any possibility of pollution by using the modern technology? That is the question.

SHRI G. SWAMINATHAN: Sir, It it only a carcinogenic chemical and not a germ.

SHRI KAMAL NATH: Sir, it has been dealt with enough.

MR. CHAIRMAN: Question No. 222.

Increase in the capacity of HBJ Pipeline

*222. SHRI SOM PAL:†
SHRI CHIMANBHAI MEHTA:

Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

(a) whether it is a fact that the capacity of HBJ pipeline was proposed to be increased from 8.8 million cubic metres to 18.2 million cubic metres by 1991;

(b) whether this target has been achieved if not, what is the shortfall and what are the reasons therefor;

(c) whether it is a fact that there was a plan to further increase the capacity to 33 million cubic metres by 1993;

(d) whether these plans are progressing as per schedule, if not, what are the reasons therefor; and

(e) what would be the estimated loss of revenue on account of the delays and short-fall?

THE MINISTER OF STATE IN THE MINISTRY OF PETROLEUM AND NATURAL GAS WITH ADDITIONAL CHARGE OF THE MINISTER OF STATE IN THE MINISTRY OF DEFENCE (SHRI S. KRISHNA KUMAR): (a) No, Sir.

(b) Does not arise.

(c) and (d) The proposal to upgrade the capacity of the HBJ Pipeline to 33.4 MMSCMD by 1995-96 is under the consideration of the Government.

(e) Does not arise.

†The Question was actually asked on the floor of the House by Shri Som Pal.